

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DEAN L. SICKING, JOHN DOUGLASS REID, RONALD KEITH
FALLER, BRIAN GEORGE PFEIFER, BARRY THOMAS ROSSON and JOHN
ROBERT ROHDE

Appeal No. 2001-0291
Application No. 08/772,559

ON BRIEF

Before McQUADE, NASE and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-17, which are all of the claims pending in this application.¹ Claim 14 was amended subsequent to the final rejection (see Paper Nos. 15 and 16).

¹ We note that appellants filed a Terminal Disclaimer (Paper No. 11) in this application to overcome an obviousness type double patenting rejection based on Application No. 08/583,307, filed January 5, 1996.

BACKGROUND

The appellants' invention relates to a guardrail barrier which provides an effective depth or capture area intended to receive a moving vehicle in a recessed portion of the guardrail barrier bounded by upper and lower curved portions projecting toward the roadway to stabilize the vehicle and reduce the tendency for the vehicle to vault over or dive under the barrier or to roll when redirected by holding the vehicle against upward and downward motion (specification, p. 1). Claim 1, the sole independent claim on appeal, is illustrative of the invention and reads as follows:

1. A guardrail barrier that balances section modulus, moment of inertia and membrane effect without requiring substantially more material to reduce the tendency of high center of mass vehicles from turning over comprising:

outer curves;

a central portion between said outer curves;

the central portion and outer curves being positioned to provide an effective depth of between substantially 9 to 15 inches.

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Martin et al. (Martin)	2,536,760	Jan. 2, 1951
Brown et al. (Brown)	3,214,142	Oct. 26, 1965

Claims 1-17 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim that which appellants regard as their invention.

Claims 1-12 and 14-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Brown.

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown.

Claims 1-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Martin.

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Martin.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection and answer (Paper Nos. 13 and 20) for the examiner's complete reasoning in support of the rejections and to the brief (Paper No. 19) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The indefiniteness rejection

The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. See In re Warmerdam, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). In determining whether this standard is met, the definiteness of the language employed in the claim must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977).

According to the examiner, the claims are indefinite because they are "generally narrative in form and replete with indefinite and functional or operational language" (final rejection, p. 2). In particular, the examiner objects to the

use of such terminology as effective depth, length of the edge, area of the edge, crush strength, S_y , bearing area and total bearing area on the basis that the claims provide no definition of their physical association with the structure of the guardrail system and that there are no reference points given for these design parameters to define the measured values (answer, p. 3).

The examiner acknowledges that the above-mentioned terms and phrases are defined in the specification, but finds fault with the fact that these terms are not defined in the claims themselves (answer, p. 7). It is well settled, however, that it is entirely proper to use the specification to interpret what appellants meant by a word or phrase in a claim. In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). In this instance, the use of appellants' specification to interpret the claim language is entirely proper. When read in light of the specification, the above-mentioned terms of the claims are, in our opinion, clear and definite.

With regard to the functional language in claim 2, the examiner concedes that functional language is permissible in a claim, but urges that there must be sufficient structure

recited in the claim to enable the function to be effected (answer, p. 7). The examiner's position in this regard is not well taken, as there is nothing intrinsically wrong with defining something by what it does rather than what it is. In re Hallman, 655 F.2d 212, 215, 210 USPQ 609, 611 (CCPA 1981). As noted by the Court in In re Swinehart, 439 F.2d 210, 212 n.4, 169 USPQ 226, 228 n.4 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. So long as appellants are claiming what they regard as their invention and the language used is sufficiently precise and definite to provide a clear-cut indication of the scope of the subject matter embraced, the second paragraph of 35 U.S.C. § 112 provides no authority for rejecting a claim on the basis of any language, functional or otherwise. See Id., 439 F.2d at 213, 169 USPQ at 229.

We do not share the examiner's view that it is unclear if the phrases "an effective depth," "an edge area," "a section modulus" and "a moment of inertia" recited in claims 9 and 10 reference the respective phrases previously recited in claims 1 and 2. It is readily apparent to us that these phrases

refer back to the corresponding phrases in claims 1 and 2. Moreover, the meaning of the first and second characteristics recited in claim 9 is clear from the express definition thereof in the claim.

For the foregoing reasons, it is our opinion that the examiner's indefiniteness rejection of claims 1-17 is not well founded.² It follows that we shall not sustain this rejection. We do, however, enter a new rejection of claims 1-17 under the second paragraph of 35 U.S.C. § 112, infra, pursuant to 37 CFR § 1.196(b).

The prior art rejections

Normally, when substantial confusion exists as to the interpretation of a claim and no reasonably definite meaning can be ascribed to the terms in a claim, a determination as to patentability under 35 U.S.C. § 102 or 103 is not made. See In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962)

² Having said this, however, we suggest that, in the event of further prosecution, in order to render the claims more easily readable, appellants consider amending the claims to: insert the term --cross-sectional-- in referring to the edge, area, edge area and area of the edge in claims 2, 3, 9 and 10; refer to the "edges" in claim 11 and the "edge" in claim 13 as --end-- edge(s); and, in claim 13, change "opening" to --openings- and "sections" (third occurrence) to --openings--. Additionally, the distinction between the "bearing area" of each bolt and the "total bearing area" of the bolts could be clarified in claim 17.

and In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). In this instance, notwithstanding our conclusion that claims 1-17 are indefinite, for the reasons discussed infra in our new ground of rejection pursuant to 37 CFR § 1.196(b), we are able to reach a determination that the rejections of claims 1-17 under 35 U.S.C. §§ 102 and 103 are not sustainable.

Turning first to independent claim 1, the examiner's anticipation rejections are based on the position that each of Brown and Martin discloses the structure of the guardrail barrier as claimed and that, as such, the quantitative ranges/values for the various design parameters are inherent in the structure (answer, pp. 4-6). In the alternative, even if the quantitative ranges/values are not inherent, as the rationale for the obviousness rejections, the examiner asserts that "it would have been obvious at the time of the [appellants'] invention to choose to design within the claimed ranges as the use of optimum or workable ranges discovered by routine experimentation is ordinarily within the skill of the art" (answer, pp. 5 and 6).

Claim 1, the sole independent claim before us on appeal, recites a guardrail comprising outer curves and a central portion between the outer curves, the central portion and outer curves being positioned to provide "an effective depth of between substantially 9 to 15 inches." As defined on page 2 of appellants' specification, the "effective depth" is the distance between the centerlines of the two outer curves. This "effective depth" or capture area is intended to receive a moving vehicle in a recessed portion of the guardrail barrier to stabilize the vehicle and reduce the tendency of the vehicle to vault over or dive under the barrier (specification, p. 1).

Brown discloses a barrier which is "about a foot wide"³ (col. 2, line 28) and Martin does not specify any dimensions of the disclosed road guard. Neither Brown nor Martin expressly discloses an effective depth value or range. Under principles of inherency, when a reference is silent about an asserted inherent characteristic, it must be clear that the missing descriptive matter is necessarily present in the thing

³ It appears that Brown's width dimension corresponds to appellants' depth dimension.

described in the reference, and that it would be so recognized by persons of ordinary skill. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). The examiner has not presented any factual basis, and we discern none on our own, to support the determination that the barrier of Brown or Martin inherently has an effective depth within the range recited in claim 1.

Accordingly, we shall not sustain the examiner's rejections of claims 1-12 and 14-17 as being anticipated by Brown and claims 1-17 as being anticipated by Martin.

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

Discovery of an optimum value of a result effective variable is ordinarily within the skill of the art. See In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980) and

In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

However, exceptions have been found where the results of optimizing the variable are unexpectedly good or where the parameter optimized was not recognized to be a result-effective variable. In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8-9 (CCPA 1977). In this instance, as neither Brown nor Martin provides any indication that the effective depths of the barriers disclosed therein are result-effective variables, the examiner's conclusion that the recited effective depth would have been obvious appears to stem from impermissible hindsight. Accordingly, we shall not sustain the examiner's rejections of claims 1-17 as being unpatentable over Brown or Martin.

NEW GROUND OF REJECTION

Pursuant to 37 CFR § 1.196(b), we enter the following new ground of rejection.

Claims 1-17 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim that which appellants regard as their invention.

Independent claim 1 recites a barrier "that balances section modulus, moment of inertia and membrane effect without requiring substantially more material to reduce the tendency of high center of mass vehicles from turning over." As claim 1 does not define the reference relative to which the "substantially more material" and reduction of the tendency of high center of mass vehicles from turning over are measured, it is not possible for one skilled in the art to determine with any certainty the metes and bounds of the invention. Consequently, we conclude that claim 1 fails to comply with the second paragraph of 35 U.S.C. § 112. Claims 2-17 depend from claim 1 and are likewise indefinite.

In the event that appellants' claims are ultimately amended to overcome the deficiency noted above, the examiner may wish to consider the patentability of at least independent claim 1, and perhaps several of the dependent claims as well, over the prior art barrier described on pages 2 and 3 of appellants' specification. Appellants' admitted prior art barrier comprises upper and lower curved portions and an effective depth of 7.63 inches, which falls within the range of "between substantially 9 to 15 inches" recited in claim 1,

given appellants' definition of "substantially" as "within 20 percent" on page 20 of the specification. Moreover, it appears that several other parameters of appellants' admitted prior art barrier fall within the ranges of the parameters recited in the dependent claims.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-17 under 35 U.S.C. § 112, second paragraph, and under 35 U.S.C. §§ 102 and 103 is reversed. A new rejection of claims 1-17 under the second paragraph of 35 U.S.C. § 112 is entered pursuant to 37 CFR § 1.196(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

- (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to

the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED; 37 CFR § 1.196(b)

JOHN P. McQUADE)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
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Appeal No. 2001-0291
Application No. 08/772,559

Page 15

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